AGRICULTURAL.

TOPICS OF INTEREST RELATIVE TO FARM AND GARDEN.

To Tell the Age of a Horse.

To tell the age of any horse,
Inspect the lower jaw, of course:
The sixth front tooth the tale will tell,
And every doubt and fear expel.

Two middle "nippers" you behold
Before the colt is two weeks old.
Before eight weeks two more will come;
Eight months the "corners" cut the gum.

The outside grooves will disappear
From middle two in just one year.
In two years from the second pair;
In three the corners, too, are bare.

At two the middle "nippers" drop;
At three the second pair can't stop.
When four years old the third pair goes;
At five a full new set he shows.

The deep black spots which pass from view
At six years from the middle two.
The second pair at seven years;
At eight the spot each "corner" clears.

From middle "nippers" upper jaw
At nine the black spots will withdraw.
The second pair at ten are white:
Eleven finds the "corners" light.

As time goes on, the horsemen know,
The oval teeth three sided grow;
They longer get, project before
Till twenty, when we know no more.
—*Toronto Truth.*

Points of Experiments.

Experiments of uncommon interest were made by the West of England Society on twenty-one farms, in thirteen different and distant counties, to test in broad fields the results attained on a small scale at Rothamsted and Woburn. Dr. Lawe's teachings have been corroborated wholly, so far as these trials went. They show that (1) a good clover crop renders artificial manures unnecessary and unprofitable. (2) But after grain crops or bare fallow nitrogenous manure becomes profitable. (3) Mineral manures alone have given poor results, but are useful with nitrogen. (4) As a means of supplying this, nitrate of soda has done rather better than sulphate of ammonia. (5) No application of barnyard manure has equaled the artificial manures, when considered wholly in the one first year of application. (6) The influence of liming remains variable and uncertain. (7) Wheat especially requires nitrogen. The formidable clover-sickness which has been a puzzle to everybody is said to be likely to become preventable through Miss Ormerod's entomologic researches. A complete series of observations are to be made on this point during the season. —*New York Tribune.*

Feeding Buttermilk to Pigs.

Buttermilk is a highly nitrogenous food, containing, as it does, about one part nitrogen to two parts carbon—the proportion of nitrogen being twice as much as necessary for profitable feeding, that is to feed it without waste. Cornmeal on the other hand, is highly carbonaceous, containing eight to nine parts carbon to one part nitrogen. It is at least twice as carbonaceous as it should be for feeding growing pigs, just as buttermilk is too nitrogenous. Now a due admixture of these two feeds will properly balance the ration and secure the greatest economy both in preventing waste and providing the greatest amount of nutriment. In feeding pigs at the Wisconsin agricultural experimental station the rule has been to allow one pound of cornmeal to every gallon of buttermilk. This leaves the ration still strong in the nitrogenous element necessary to promote growth. As the pigs advance in size and fat is more desirable than growth, more cornmeal is added. This makes the food more carbonaceous and causes the hogs to lay on more fat.

In some experiments made at the Massachusetts agricultural experimental station—counting corn meal at $28 per ton and buttermilk at 16 cents per 100 pounds—it was found that a pound of pork, fed at first on a slop, made of 12 ounces of corn meal for every gallon of buttermilk, cost but 4.6 cents; but that after gradually increasing the corn meal until it reached within a fraction of two pounds of the meal to each gallon of the buttermilk, the cost of making a pound of pork amounted to 5.73 cents. This latter was in the coldest part of the winter, and it was thought that the difference in temperature (requiring, as it did, a more carbonaceous food) accounted in a great measure for the difference in the cost of the pork.—*Baltimore Sun.*

Farm and Garden Notes.

Hogs should always have a dry and warm place to lie in. They do not want a great mass of straw, in which they will crawl to get hot and steam, and then when they come out get chilled, but an armful of straw to remain a day or two and then to be thrown out and mixed with the manure.

In the course of advice to small dairymen, a writer says that butter made from perfectly sweet cream will not retain its keeping qualities as that where the cream is allowed to become slightly acid. It should be kept thoroughly stirred while gathering enough for a churning, and churned at a temperature of sixty degrees in winter and fifty-eight degrees in summer.

There is no animal on the farm that more appreciates dry clean quarters than a pig. They will thrive better, fatten faster, be more healthy, and make better food if cared for as they ought to be. It is proper enough to allow them to run on the horse manure where large quantities of bedding are used, but requiring them to wallow in filth is downright cruelty.

When farming tools are not in use they should be housed and protected from the weather, and yet how negligent are many farmers in this regard, leaving valuable implements exposed for weeks to the weather and the destructive influences of its agencies. Just a little attention to these matters will be the means of saving many dollars in the farmer's lifetime.

Pretol, a celebrated French veterinary surgeon, considers that we carry the grooming of horses to excess, and to make them delicate. He does not advocate neglect of cleanliness, but thinks that too much excitement of the skin makes the horses susceptible to catching diseases by destroying the equilibrium which ought to reign between the functions. There is little doubt that many of our city horses are injured by being pampered and over-groomed.

Few men of discretion, observes the *Husbandman*, fail to appreciate the advantage of a regular rest day, one in seven. The farmer values it for himself and for his work animals. The reasons for it, aside from religious considerations, are many and weighty. This respite for one day in seven gives an elasticity and vigor that produces better results in work than comes from the slavish drag and drudgery of the life that is borne down by a constant, uninterrupted burden.

When horses have been idle some time, as they too often are on many farms, it requires careful feeding to get them in condition for working. It is not uncommon to grain heavily, thus overloading stomachs weakened by poor or insufficient food, and making a bad matter worse. A horse is not fitted but rather unfitted for work by being fed a peck of oats just before. This is a task for his stomach which requires most of his strength. If driven or worked hard besides the horse will be thrown into diarrhœa, getting rid of the loads on the stomach not only without receiving any strength from it, but making it a source of positive weakness.

Living Under Water.

The length of time during which a person can live under water, without the aid of any diving apparatus, is a question in dispute among scientific men.

Some travelers have told marvelous stories of the natives of Eastern countries who were able to stay ten, or even fifteen, minutes under water, but there can be no doubt that these are absurd exaggerations. It is well known that the ordinary divers for coral, sponge and pearl-oysters do not remain under more than two minutes, and the "men-fish" who exhibit in the museums do not exceed two minutes and a half.

The doctors differ in their opinion as to the time at which death comes in drowning. Some say in three minutes, others in five, but none set a longer time than this, except the drowning person faints, when respiration and animation cease.

A Frenchman, named Lacassagne, has been for some time studying this subject, and the results of his experiments and observations are given in the *Revue Scientifique*. The man upon whom he experimented was a famous Hungarian swimmer named James, who, among other exploits, once swam from Calais to Dover, and had remained under water for four minutes and fourteen seconds.

Before diving, it was observed he first expelled all the air from his lungs, and then took a long breath. After he had been under water for a minute his heartbeats became slow, irregular and feeble. After two minutes and thirty-seven seconds there was a rush of blood to the head, and his eyes appeared sunken. Still he continued to breathe amply and regularly at the rate of twenty respirations a minute, while at the same time the observer noticed that the abdominal cavity diminished greatly in size.

M. Lacassagne believes from this, and from the fact that James was continually swallowing his saliva, that, in drawing the long breath at first, he *swallowed* a quantity of air, and that the ordinary respiratory channels being closed, he takes into his lungs the air contained in his stomach, and from thence again taken, somewhat purified, into his lungs. That is, in other words, he makes of his stomach a reservoir for air, a fact which, if true, will account for his ability to remain for such an extraordinary time under water. This process, which the diver performs instinctively and mechanically, M. Lacassagne believes can and should be learned by all swimmers, as giving them a far greater endurance under the surface than they now possess. —*Youth's Companion.*

Uncle Sam's Money Orders.

The Money Order Department of the New York Postoffice opens at 10 A. M. There is always a rush at the opening, and the line of applicants waiting for money orders and postal notes stretches along the entire length of the room and out of the doors into the corridor. An officer does his best to expedite matters by inquiring of each his or her particular business. Inside the railing John Francisco scratches away with his pen like mad. Having filled out the money order or postal note, he fills out a blank with the amount of order or note and the fee, which blank he hands to the applicant.

The latter takes it to the next window, where he hands in the money and the blank and receives from the teller the order or note. Matters are expedited now by making the postal note payable at any money order office in the United States. The limitation of postal notes to sums under $5 makes a great deal of writing and also much trouble for remitters. Very few persons have occasion to send $4.99 through the mail, while very many wish to remit $5 at a time. The latter are obliged to get an order for $4.99 and inclose a cent with it.

About 300 persons apply each day for money orders and postal notes.

A Michigan girl surprised a thief in a barn and chased him with a pitchfork until he dropped the harness he had stolen. It is reported that she is receiving an average of fifteen offers of marriage a week.

HOUSEHOLD AFFAIRS.

Nice Curtains.

Pretty curtains for a bedroom may be made of linen scrim in this way: Make the curtains long enough to allow of a deep hem, top and bottom. Hem also the front edge of each. Take a large spool and mark with a lead pencil two circles slightly overlapping each other in alternate groups for a border on the hem. Three smaller circles may be used in each group if preferred. Choose wash embroidery silk of any two colors that will go well together and harmonize with the prevailing tones in the room such as blue and gold, red and olive, or brown and pink. Work the circles in outline stitch, and suspend the curtains from small rods. It is best to scald the silk before using, as this will prevent the colors from running when the curtains are washed. A more elaborate curtain which may be used in a parlor, can have the circles scattered all over it.

Making Tea.

But not many days ago I found a new and better way of making tea, and that the tea question should ever be stirred up and need settling once again surprised me. Mother's ways of making it had seemed unquestionable at first: One teaspoonful of tea, one cupful of boiling water; steeped, not boiled, five minutes. But night after night there floated on my husband's cup one, two or a dozen tiny particles of stem and leaf, until a strainer there must be, but, "A pretty silver one," I said, "And I will wait till Christmas." Then came my best of husbands to the rescue with a mild suggestion; for he is long-suffering, and neither demands improvements nor finds fault with present methods in my housekeeping. He proposed teaching me his mother's way of making tea. It was to use the same proportion as before, but not to pour the whole amount of boiling water on the leaves until they have first steeped in just enough to cover them, three minutes. Then add the amount of water required, and serve. If the water really boils there will be no "floaters."

By the new rule, found in our daily paper, tea is made with cold water and is intended to be used iced in tumblers. But accidentally we have discovered that it makes superior hot tea also. Four or five hours before using, pour one cupful of cold water over a teaspoonful of tea leaves. At tea time strain and serve as iced tea, or heated in the teapot. The straining before heating gives unusual delicacy to the flavor.—*Good Housekeeping.*

Recipes.

LEMON CAKES.—Three-fourths of a pound of flour and two ounces of butter rubbed together in a dry state; then add three fourths of a pound of white sugar, the juice and rind of one lemon and one egg. Bake in small cakes on a tin.

MOLASSES COOKIES.—One cupful of butter, two cupfuls of molasses, one teaspoonful of cloves, one teaspoonful of ginger, sufficient flour to make a stiff batter, not dough. Mold with the hands into small cakes and bake in a steady rather than quick oven, as they are apt to burn.

SALMON SALADS.—To a can of salmon take eight or ten stalks of celery; cut the celery into small pieces and mix with the salmon, which should also be picked into small bits; sprinkle over a little salt and a very little pepper, and pour on some good vinegar. A small onion may be added if desired.

DRIED PEA SOUP.—Soak the peas over night, using a quart of water to each quart of peas, and putting in about a teaspoonful of soda to soften them; wash them off in the morning and put them in fresh water and boil till tender; boil with a pound and a half of salt pork or beef; lift the peas out and mash through a colander, putting back the paste without the skins; salt and pepper to taste, and boil up well again.

CHICKEN PIE.—Joint the chicken, which should be young; boil them till nearly tender in just sufficient water to cover them; take them out of the liquor and lay them in a pudding dish lined with pie crust, and to each layer of chickens put three or four thin slices of pork, or a couple of ounces of butter cut into small bits; season each layer well with pepper and salt, and dredge flour over the top, and then turn in the liquor in which the chicken was stewed, till you can just see it at the top; cover it with pie crust, cut a slit in the centre, and ornament with strips of pastry. Bake in a quick oven for about an hour.

WAFFLES.—Waffles should be made quickly and beaten thoroughly. Always add the whites of the eggs just before baking. Butter is much nicer than lard for shortening. Never use sugar for waffle batter, as it tends to make them heavy and tough. Waffle batter should be very thin. To make good waffles, take one pint of buttermilk, one teaspoonful of soda, one tablespoonful of melted butter, one teacup of flour, the yolk of four eggs and a small pinch of salt; beat the whites separately to a stiff froth, and add them the last thing. Have the waffle-tins well greased and very hot, pour in the batter and bake brown. When taken up spread with butter and keep warm.

He Says So Himself.

"That must be a man of great mind, Jack."

"Why so, Bill?"

"Because he's always saying 'I've a great mind'—to do this and that and every other thing." —*Kentucky State Journal.*

The Scottish Order of the Thistle received its warrant from James VII., of Scotland, in 1687—just 200 years ago.